

# HAZARDOUS COMMUNICATION PROGRAM

for

Stuttgart\Pine Bluff Locations (SNARC\DBNRRRC\ASRU)  
U.S. Department of Agriculture  
Agricultural Research Service

## I. INTRODUCTION

The United States Department of Agriculture, Agricultural Research Service, and the Stuttgart/Pine Bluff Location (**SPBL**), which consists of the Aquaculture Systems Research Unit (ASRU, 1200 N. University Dr., Mail Stop 4912, Pine Bluff, AR 71601), the Dale Bumpers National Rice Research Center (DB NRRRC, 2890 Hwy 130 E., P.O. Box 1090, Stuttgart, AR 72160) and the Harry K. Dupree Stuttgart National Aquaculture Research Center (HKD SNARC, 2955 Hwy 130 E., P.O. Box 1050, Stuttgart, AR 72160) are committed to employees knowing the hazards of and protections against dangerous chemicals.

The general intent of this plan is to comply with the various local, state, and federal regulations governing employee chemical awareness. Chief among these is the Hazard Communication Standard found in 29 Code of Federal Regulations (CFR) 1910.1200.

Joel Ledbetter (870-673-4483 ext. 225) is the Hazard Communication Coordinator for **SPBL**

The plan will be available for all employees to review, and a copy will be located with the safety files in each unit's Library. This plan will be reviewed annually by the CDSO and updated as necessary.

This plan does not apply to:

1. Pesticides governed by other regulations
2. Hazardous chemical wastes regulated by the Environmental Protection Agency
3. Wood or wood products
4. Tobacco or tobacco products
5. Foods, drugs, or cosmetics intended for personal use by employees
6. Consumer products used in the same manner as a normal consumer in the general public

## II. REFERENCES

29 CFR 1910.1200, Hazard Communication

U.S. Department of Labor Publication OSHA-3112, Air Contaminants - Permissible Exposure Limits, 1989 ed.

## III. DEFINITIONS - For the purpose of this plan, the following definitions will apply:

Consumer Product: A product defined by the Consumer Product Safety Act or the Federal Hazardous Substances Act

Material Safety Data Sheet (MSDS): In general, a document that identifies a chemical and its common names, its physical and chemical characteristics, physical and health hazards, general control measures, and emergency and first aid procedures The MSDS

must also include the name, address, and telephone number of the originator of the chemical, and who can provide additional information.

#### **IV. RESPONSIBILITIES**

The Location Coordinator:

**The LC is Don Freeman**

1. Approves, by signature, this plan.
2. Authorizes and supports the implementation of this plan, the annual review of this plan, and amendments or changes to this plan.
3. Provides resources for training, equipment, and other support called for in this plan.

The Location Administrative Officer:

**The LAO is Jeanie Gwathney**

4. Maintains files and records of program activities.

The Hazard Communication Coordinator acts in consultation with Location management and:

**The Current HWC\HCC is Joel Ledbetter**

- Provides information on chemical hazards and protective strategies to employees
- Oversees the Hazard Communication Plan
- Serves as a source of advice and counsel to all employees at **SPBL** in the area of chemical hazard identification and reduction
- Provides or arranges appropriate training to employees regarding chemical hazards, controlling strategies, and emergency procedures at **SPBL**
- In consultation with the Southern Plains Area Safety & Health Manager, reviews this plan annually, monitors its effectiveness, and evaluates new experiments or processes at **SPBL** involving hazardous chemicals for addition to this plan.

Research Leaders, lead scientists, and department heads will:

- Assist the Hazard Communication Coordinator in developing the chemical inventory, assess the hazards of chemicals on the inventory, and develop controlling strategies for the identified chemical hazards.
- Ensure employees comply with provisions of this plan.
- Ensure proper labeling, storage, use, and transfer of chemical agents.
- Ensure proper signage in laboratories or other areas where potentially hazardous chemical agents are being studied or are in use.
- Ensure that personnel have received proper training prior to initiating operations involving potentially hazardous chemical agents.

#### **V. PROGRAM ELEMENTS**

Chemical Inventory

- A chemical inventory listing all the chemicals used at **SPBL** shall be kept and updated annually.
- The inventory will be available upon request and will also be available

online.

#### Hazard Determination

- The health and physical hazards of chemicals used at **SPBL** must be determined.
- It is **ARS** policy to rely on the physical and health hazard evaluations done by chemical manufacturers and importers, as listed on their MSDSs.
- Chemicals synthesized in **SPBL** facilities:
  - ✓ If the synthesized chemical is for **SPBL** laboratory use only, no MSDS need be prepared for it; however, employees shall be advised of the hazards of and protections for the synthesized chemical.
  - ✓ If the synthesized chemical is manufactured for other users, then the originator should prepare an MSDS for it.

#### Container Labeling

- The receiving scientist (or department supervisor, in non-laboratory situations) will verify that all chemical containers received for use will be labeled with:
  - ✓ The contents
  - ✓ The appropriate hazard warning
  - ✓ The name and address of the manufacturer, importer, or responsible party
- It is the policy of **SPBL** that no container will be released for use until the above data is verified.
- The using scientist or department head will ensure that all secondary containers are labeled with either an extra copy of the original manufacturer's label or with a generic label which identifies the contents, the date opened, the expiration date, and the hazard warning. For help with labeling, please see the CDSO.

#### Material Safety Data Sheets (MSDS)

- Copies of MSDSs for the chemicals used at the **SPBL** laboratories are kept alphabetically arranged in each unit's Library. They are available for reference by employees during working or non-working hours.
- If MSDSs are not available or new chemicals do not have an MSDS, the CDSO should be contacted immediately.
- The CDSO is responsible for ensuring that MSDSs for chemicals are available to any interested employee.

#### Hazardous Non-routine Tasks

- Periodically, employees are required to perform hazardous Non-routine tasks involving chemicals.
- Prior to starting work on such projects, each affected employee will be given information by their supervisor or by the CDSO about hazardous chemicals to which they may be exposed during such activity, including:

- ✓ Specific chemical hazards
  - ✓ Protective/safety measures the employee can take.
  - ✓ Measures the Location has taken to lessen the hazards including ventilation, personal protective equipment, and the presence of other employees.
  - ✓ Emergency procedures
- Examples of Non-routine tasks performed by Location employees
    - Radio iodination
    - Chemical mutagenesis of rice seed

#### Chemicals in Unlabeled Pipes

- It is **SPBL** policy that chemical pipes or equipment trains be labeled as to contents.
- There may be occasions when work may be performed in areas where chemicals are processed or transferred through unlabeled pipes or equipment trains. Prior to starting work in these areas, employees shall contact the supervisor of the area or the CDSO for information regarding:
  - ✓ The chemical in the pipe or process
  - ✓ Potential hazards
  - ✓ Safety precautions which should be taken
  - ✓ Informing Contractors
- It is the responsibility of the Contracting Officer's Representative (with the appropriate assistance from the CDSO, the Research Leader, and Laboratory Director) to provide contractors the following information:
  - ✓ Hazardous chemicals to which they may be exposed while on the job site.
  - ✓ Precautions and protective measures the contractor may take to lessen the possibility of chemical exposure.
  - ✓ Documentation should be maintained of this information

## VI. TRAINING

Employees covered by the Hazard Communication Standard will be provided with information and training so that they are acquainted with chemical hazards and protective strategies.

This training will occur as soon after the time of initial assignment as practicable and prior to new assignments involving different exposure situations. Refresher training will be given annually or as needed.

The training/information sessions shall include:

- An overview of the requirements of the Hazard Communication Standard.
- Location and explanation of the **SPBL** Chemical Hygiene, Hazard Communication, Biosafety, Radiation Safety, and Facility Self Protection Plans.
- Chemicals present in their workplace operations.

- Location and availability of the **SPBL** written hazard communication program.
- Location of reference materials and material safety data sheets (MSDS).
- How to read labels and review MSDSs to obtain chemical hazard information.
  - Physical hazards of chemicals
    - Flammable/combustible.
    - Corrosive.
    - Toxic.
    - Unstable (reactive).
  - Exotic characteristics (compressed gas, pyrophoric, explosive, water reactive, light sensitive, etc).
- Health hazards, including target organs and permissible exposure limits, of chemicals
  - ✓ Acute/Chronic hazards.
  - ✓ Irritants.
  - ✓ Sensitizers.
  - ✓ Toxins.
  - ✓ Nervous, respiratory, reproductive system effects.
  - ✓ Carcinogens, teratogens, mutagens.
  - ✓ Radioisotopes.
- Routes of chemical exposure
  - ✓ Inhalation.
  - ✓ Skin Absorption.
  - ✓ Ingestion.
  - ✓ Injection.
- Dose
  - ✓ Concentration of exposure.
  - ✓ Duration of exposure.
- Methods, including monitoring, to determine the presence or release of hazardous chemicals in the work area.
- Techniques to lessen or prevent exposure to these hazardous chemicals:
  - ✓ Facility design.
  - ✓ Personal protective equipment.
  - ✓ Safe operating procedures.
- Emergency procedures to follow if they are exposed to these chemicals.
  - ✓ First aid.

✓ Medical consultation.

- Other training, as appropriate, on laboratory safety matters

After receiving the training, each employee will sign a form to verify the training received, receipt of written materials, and understanding of the Location's policies on Hazard Communication. A copy of this form will go to the CDSO.

When new hazardous chemicals or procedures are being introduced into any section, each employee of that section will be given information as outlined above.

## **VII. ANNUAL INSPECTION AND PROGRAM REVIEW**

Inspection will verify that the chemical inventory is up to date, chemicals are properly labeled, MSDSs are available for reference, and that employees are aware of - and complying with - protective strategies.

The review will determine adequacy of current program and whether changes, updates, or improvements are needed.

A copy of the inspection and review will be given to the Location Coordinator for correction of any discovered inadequacies or noncompliance.

A copy of the annual inspection will be kept in each unit's Library, free for employee review.

## **VIII. RECORD KEEPING AND REPORTING:**

The following records will be kept:

- Program activities
- Annual inspections and program reviews
- Advisories to Contractors of potential chemical dangers and protective strategies.

Records will be kept by the CDSO for employee review.